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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,653	11/20/2001	Kazuhiko Isoyama	01600080AA	8991

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EXAMINER

TRAN, NGHI V

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,653

Applicant(s)

ISOYAMA, KAZUHIKO

Examiner

Nghi V. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on June 05, 2006. Claims 1, 4, 6, 37, 40, and 42 have been amended. Therefore, claims 1-72 are presented for further examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hultgren, U.S. Patent No. 6,134,589 (hereinafter Hultgren), in view of Feinberg, U.S. Patent No. 6,798,745 (hereinafter Feinberg), and further in view of Nag et al., U.S. Patent Application Publication No. 2006/0056298 (hereinafter Nag).
4. With respect to claims 1, 4, 6, 37, 40, and 42, Hultgren teaches a QoS server [20 i.e. QSC server], which is used in a network system [see abstract] comprising:
 - a network, main signal gateways [24T i.e. a plurality of intermediate telephony nodes] for accommodating outside networks in the network and executing conversion of main signals between the network and the outside networks

[fig.1], a call setup server for setting up a call [col.2, ln.52 - col.3, ln.61], and signaling gateways for executing conversion of signaling signals between the call setup server and the outside networks [figs.1-2], including:

- a network monitoring section for monitoring the network state [col.5, lns.9-56];
- a network state database [85 i.e. link current status database] for storing network state information obtained at the network monitoring section [see table 2];
- a resource allocation computing section [i.e. connection parameter table, see table 4] for computing resource allocation information for applications based on resource requirements with reference to the network state information [col.10, ln.5 - col.11, ln.57];
- a resource allocation database [84 i.e. route map database] for storing resource allocation information [col.5, ln.9 - col.6, ln.67 and see table 1]; and
- a network setup section [83 i.e. session database] for setting up resource allocation on the network based on the resource allocation information [fig.2].

However, Hultgren does not explicitly show a network monitoring section for monitoring the network state and a resource allocation computing section for computing resource allocation information, including failures and received signal quality.

In a communication system, Feinberg suggests a network monitoring section for monitoring the network state [i.e. monitors QoS parameters may include packet loss, .. and excessive network delay and/or jitter, col.4, lns.20-67] and a resource allocation computing section for computing resource allocation information [i.e. process QoS data to determine QoS parameter value, fig.3], including failures [i.e. packet loss] and received signal quality [i.e. delay and/or jitter].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hultgren in view of Feinberg by including failures and received signal quality because this feature are able to provide guaranteed QoS to establish connections [Feinberg, col. 1, lns.21-29]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to an acceptable range of QoS values [Feinberg, col.1, lns.61-62].

Further, Hultgren in view of Feinberg do not explicitly show setting up resource allocation on the network based on an aggregate of calls and the resource allocation information.

In a pre-allocation network, Nag discloses setting up resource allocation on the network based on an aggregate of calls and the resource allocation information [i.e. media aggregation manager 300 is provided for multiplexing several application flows over a pre-allocated reservation, paragraph 0053-0055].

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hultgren in view of Feinberg, and further in view of Nag by setting up resource allocation on the network based on an aggregate of calls

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and the resource allocation information because this feature reduces the computational resources requires by the network [Nag, paragraph 0053]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to provide reserved bandwidth, e.g., guaranteed bandwidth, for multiple application flows [Nag, paragraph 0053].

5. With respect to claims 2 and 38, Hultgren further teaches resource allocation is conducted based on the resource requirements from a resource requiring section that makes resource requirements located in the call setup server [col.7, ln.29 - col.8, ln.65].

6. With respect to claims 3 and 39, Hultgren further teaches resource allocation is conducted based on the resource requirements from a resource requiring section that makes resource requirements located in the main signal gateway [col.7, ln.29 - col.8, ln.65].

7. With respect to claims 7-12 and 43-48, Hultgren further teaches previously obtains traffic requirements and resource requirements to compute path and resource allocation, and conducts path and resource allocation before a call arrives on the network [col.1, ln.53 -col.2, ln.16 and col.7, ln.29 - col.8, ln.65].

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8. With respect to claims 13-18 and 49-54, Hultgren further teaches obtains traffic requirements and resource requirements of calls to compute path and resource allocation for an aggregate of calls, and conducts path and resource allocation [fig.5].

9. With respect to claims 19-24 and 55-60, Hultgren further teaches obtains traffic requirements and resource requirements of additional aggregate calls, when the number of connected calls exceeds a certain threshold, to re-compute path and resource allocation, and renews the threshold after additional path and resource allocation [col.10, ln.20 - col.12, ln.2].

10. With respect to claims 25-30 and 61-66, Hultgren further teaches obtains a request for resource release for aggregate calls when the number of connected calls underruns a certain threshold, and renews the threshold after resource release [col.7, ln.29 - col.8, ln.48].

11. With respect to claims 31-36 and 67-72, Hultgren further a user information database [82 i.e. customer database] for storing the resource requirements, which monitors traffic flow corresponding to the allocated resources [col.12, lns.13-41 and col.13, ln.17 - col.14, ln.27], and when detecting that the required quality is not satisfied, re-computes path and resource allocation with reference to the user information database to alter path and resource allocation [col.6, ln.5 - col.8, ln.65].

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12. With respect to claims 5 and 41, Hultgren further teaches resource allocation is conducted based on the resource requirements from a resource requiring section that makes resource requirements located in the policy server [col.4, ln.10 - col.5, ln.56].

Response to Arguments

13. Applicant's arguments with respect to claims 1-72 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. "Method and system for routing telephone calls between a public switched telephone network and an Internet protocol network," by Kaczmarczyk et al., U.S.

Patent No. 6,775,269.

b. "Method and system for monitoring broadband quality of service," by Chen et al., U.S. Patent No. 6,097,699.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER